LAKE MICHIGAN FEDERATION

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STATEMENT OF ARNOLD LEDER, PROGRAM DIRECTOR, TO U.S. ARMY CORPS OF ENGINEERS COMBINED PUBLIC HEARING ON ARMY PERMITS 4477305 and 4427402 -- PROPOSED DREDGING PROJECTS, SOUTH WORKS AND GARY WORKS.

Gary, Indiana October 23, 1974

The September 20 Notice of Public Hearing on the combined U.S. Steel (USSC) Projects states: "At issue is the need to determine if it is in the best public interest to approve the dredging and disposal activities." The public notice further states "...citizen groups feel that this work will degrade sources of drinking water and recreational activities such as swimming and fishing."

The public notice assumes an either/or position; either economic growth or environmental impact.

I have reviewed the Army Corps' files on both projects on several different occasions and have failed to discern any environmental or other groups opposed to the South Works or Gary dredging projects. We, therefore, cannot agree to limit discussion to the issues specified in the September 20, 1974 public notice.

More correctly at issue in this proceeding is the manner in which the Army Corps of Engineers discharges or has failed to discharge its responsibilities under the Environmental Protection Act.

SOUTH WORKS PROJECT

The Army Corps' Environmental Impact Statement Determination offers an illustration. The report signed by Colonel Miller is dated June 19, 1974 and states:

> Immediately downdrift of the proposed dredging location and the dredge disposal area are located beach and park facilities....
>
> Flora and fauna in the proposed dredging area will be either displaced or destroyed....
>
> Depending upon the quality of the dredged material and the precautions of the contractor in transporting dredged material, municipal water supply intakes and recreational activities can be subject to contamination.

In spite of the above, the Corps of Engineers made the following determination: "It is concluded that an environmental impact statement would be of little value in the review of this application."

SEDIMENT ANALYSIS

As of October 18, USSC was still to submit the necessary sediment analysis requested of them in a letter to the company on June 11, 1974. So basic questions as to substances to be dredged and their concentrations remain unanswered.

This past week in discussing comments submitted on the proposed projects with several federal agencies, their logic for not requesting an environmental impact statement on the project began to emerge. This logic, somewhat of a Catch 22, goes something like this:

"We haven't been given significant information indicating the need for an Environmental Impact Statement. That if sediment analysis indicated significant presence of toxic or hazardous materials, they would request an Impact Statement."

Catch 22 has been employed by the Corps here tonight. As of last week, sediment analysis still had not been submitted to the Corps or at least was not present in the application file available to the public. The Corps should take steps to expedite obtaining this information and distribute the results to interested agencies and make them available to the public.

SPOIL DISPOSAL

On February 19, 1974 the State of Indiana conditionally approved the landfilling at Gary Harbor of dredging from USSC South Works in Chicago: This approval was conditioned upon, among other things;

> In order to settle suspended solids, the material will be deposited at the west end of the disposal site which is approximately 1.8 miles from the spillway. The spillway consists of four 24 inch corrugated submerged metal pipes at the east end of the disposal area.

In spite of this condition, the Public Notice entitled Application for Permit, dated July 2, 1974, for the South Works project, was accompanied by a chart indicating two barge locations (attachment no. 1). Barge location number 1 being located extremely close to the outfall of the diked disposal area would appear to allow for rapid flow through, thus very little detention time to settle suspended solids. This deficiency should be corrected when developing the permit to reflect the conditions imposed by the State of Indiana.

USEPA COMMENTS

Under cover letter dated August 19, 1974, the USEPA submitted comments on project 4427402. As stated in the cover letter, "We will not object to the issuance of this permit provided the applicant is required to comply with our comments, as stated in the attachment."

Because a review of the applicants file does not indicate any action on the USEPA conditions it is appropriate to repeat them for the record:

1. Investigate for water supply intakes or other activites (in the vicinity of the proposed project) which may be affected by suspended solids and turbidity increases caused by work in the lake, and give sufficient notice to the owners of affected activities to allow preparations for any changes in water quality.

2. Establish and carry out a program for immediate removal of debris during construction and dredging operations to prevent the accumulation of unsightly, deleterious and/or polluted materials in the waterway.

3. Employ measures to prevent or control spilled fuels or lubricants from entering the lake, and formulate a contingency plan to be effective in the event of a spill.

4. Conduct work in the watercourse so as to minimize increases in suspended solids and turbidity which may degrade water quality and damage aquatic life outside the immediate area of operation.

5. Place all dredged or excavated materials in a confined area to prevent the return of polluted materials to the watercourse by surface runoff, or by leaching.

6. Utilize only clean rip rap material, properly graded, in order to avoid the percolation of fines which would result in excessive local turbidity.

7. Submit data to this office on the contents, composition, particle size, etc. of the bottom sediments to be dredged. Also, results of the water quality monitoring for the parameters as stated in the Public Notice at both the dredging and disposal site.

8. Stop operations if violation of water quality standards occur.

THE CORPS CARES

While reviewing the application file it was not immediately evident that the Corps new motto "The Corps Cares" had taken hold. However, there was a glimmer contained in a hand written memo dated June 25, 1974 on a routing slip, (attachment no. 2) by a Mr. Jong Choe, who I have been assured does indeed work for the Army Corps of Engineers. The memo states:

> This application can be processed for permit under the condition that the result of bottom sediment analysis does not show high degree of pollution so that the discharge effluent will not add any appreciable amount of pollution parameters to Lake Michigan. Otherwise, should be required for an adequate measure to eliminate the pollution sources e.g. treatment of effluent.

The memo further suggests several treatment possibilities directing the effluent to sewage treatment plants or utilizing filtration techniques such as a sand filter.

GARY WORKS

CLAM SHELLING

The September 20 public notice for the combined projects states:

> Gary Works- Dredging approximately 60,000 cubic yards of shoaled material with a clamshell dredge and depositing the material behind a retaining bulkhead immediately south of Gary Harbor.

The State of Indiana originally approved the project on the condition that the dredging be conducted by hydraulic cutterhead.

USSC in correspondence dated August 20, 1974 to Mr. Jones (attachment no. 3) states as follows:

> We intend to use a clam shell bucket only in the slip and not in the harbor.

Is the public notice description correct or is USSC still committed to using the clam shell only in the slip?

SEDIMENT DISPERSION

USSC's additional comments in the same paragraph referenced above raises even more interesting questions if dredging in the slip is to be conducted by clam shell. The comments continue:

> .....three Gary Work's pumphouses remove enough water from the slip each day to equal over twice the volume of water in the slip. Consequently, the flow of water is from the lake into the slip making it unlikely that turbidity from clam shelling, if in fact this causes turbidity, could affect the lake.

The USSC comments would have us believe that what comes in doesn't necessarily have to come out again. For example, if the outfall depicted in the overflight photo (attachment no. 4) has its intake in the slip to be dredged, increased turbidity, etc., would greatly impact Lake Michigan. Information as to where the intake water is used in process and the level of treatment afforded prior to discharge is needed, in order to assess this change particularly if any of the water is returned to Lake Michigan.

USEPA COMMENTS

USSC letter of June 19, 1974 (attachment no. 5) indicates USSC response to USEPA comments on the Gary Works project. USEPA comment number three states that USSC is to:

> Conduct dredging in such a manner as to minimize increases in suspended solids and turbidity which may degrade water quality.

While USSC indicated it would comply with this provision, they did not discuss the manner by which they would comply with this condition.

The USEPA submitted additional comments following the June 24 revised public notice for the Gary Works project. These comments (attachment no. 6) contain several additional requirements that the applicant did not address in his June 19 letter. The revised USEPA comments state:

> Our comments are contingent on the following:
>
> 1. Applicable only to a total of approximately 60,000 cubic yards of material to be dredged and deposited in the containment area.
>
> 2. That during the period of deposit and settling of the material in the containment area, the effluent will be monitored and the operations discontinued if the discharge does not meet applicable water quality standards.

The applicant should be requested to comply with these additional provisions and report how they plan to implement them.

Other questions that the Corps of Engineers must resolve before it issues either the South or Gary Works permits include the following:

1. The applicant estimates a 77 day detention time, based on pump rates to allow for settling suspended solids. While these dates may hold under ideal conditions, there is only a three foot difference between the current lake level and top of the impoundment, allowing even moderate wave action to cause spill over into the impoundment area. A more realistic assessment of settling time is needed before the project can be permitted, and the project approved.

2. Additionally, it should be determined whether the applicant should undertake necessary construction to control spill over.

3. The applicant still has not submitted information on particle size of sediments to be dredged at all dredging sites. This information is essential if we are to determine whether the proposed treatment techniques, e.g. settling, are going to be effective.

These questions and the others that have been raised here tonight need to be answered before the Corps of Engineers can issue the proposed permits, in fact at this stage in the game these questions should have already been answered. All of these questions raised in my testimony tonight have been raised on several occasions with members of the permit branch of the Army Corps of Engineers and the only substantive answers I have received have been "I don't know." These answers suggest at this time, the Corps of Engineers is in no position to make a determination as to whether the permits should be issued. These and the other questions raised here tonight demand resolution.

Finally, it would be unforgivable if we failed to include in the record of this proceeding what we feel has been an effort by the U.S. Army Corps of Engineers to intimidate the Lake Michigan Federation and prevent us

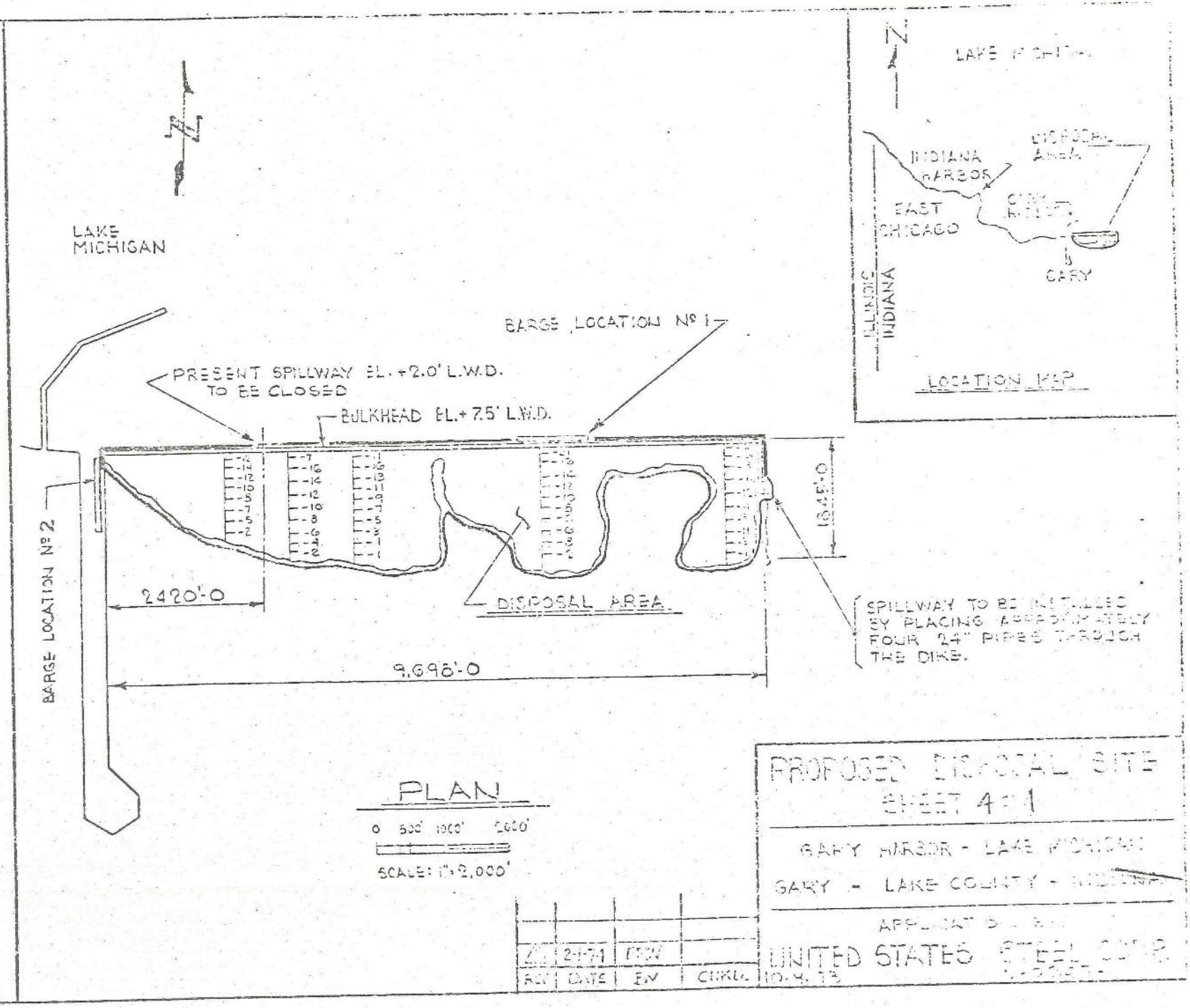
from testifying here this evening.

In spite of information contained in the public notice of combined public hearing dated September 20 which states:

> All interested individuals, groups and agencies are invited and urged to be present or represented at this hearing. Everyone will be given an opportunity to express his views and furnish specific data on all aspects of the proposed modification, including technical, economic, social, and ecological and environmental considerations.

We received from the Army Corps of Engineers a letter requesting specific names of Federation members who would be adversely affected by the proposed projects (attachment no. 7). This was apparently an effort to establish our standing in a manner similar to that required to engage in litigation in order to participate in a public hearing. We responded to this letter by requesting that the Corps of Engineers provide us with their regulatory authority for such a request. To date there has been no response.

Attachment No 1.



Attachment No. 2

ROUTING AND TRANSMITTAL SLIP

TO (Name, office symbol or location)	INITIALS	ACTION
Possible suggestion of additional requirements		CIRCULATE
1. Conversion of Effluent pipes	DATE	COORDINATION
2 to sewage treatment plant, or	INITIALS	FILE
2. Filtration Facilities similar to	DATE	INFORMATION
3 the Filter Beds for Water Treatment for Drinking	INITIALS	NOTE AND RETURN
	DATE	PER CONVERSATION
4	INITIALS	SEE ME
	DATE	SIGNATURE

REMARKS :

This Application can be processed for Permit under the condition that the result of bottom sediment analysis does not show high degree of pollution so that the discharge effluent will not add any appreciable amount of pollution parameters to Lake Michigan. Otherwise, should be required for an adequate measure to eliminate the pollution sources. - Treatment of Eff.

Do NOT use this form as a RECORD of approvals, concurrences, disapprovals, clearances, and similar actions.

FROM (Name, office symbol or location)	DATE
Jong Choe	6/25/74
	PHONE 3-6502

OPTIONAL FORM 41
AUGUST 1967
GSA FPMR (41CFR) 100-11.206

5041-101-01

* GPO : 1973 OF—499-218

Attachment No 3

United States Steel Corporation

ENGINEERING

600 GRANT STREET
PITTSBURGH, PENNSYLVANIA 15230

August 20, 1974

Mr. James P. Jones
Chief, Operations Division
Department of the Army
Chicago District, Corps of Engineers
219 S. Dearborn Street
Chicago, Illinois 60604

Dear Mr. Jones:

Subject: Dredging Slip and Harbor - Gary Works

This is in reply to your letter of August 5, 1974, transmitting comments from BPI, Sierra Club, Lake Michigan Federation, and Lake County Fish & Game Protective Association, Inc., on proposed slip and harbor dredging at Gary Works. We are responding only to those comments which were not previously covered in our letter of June 19, 1974.

The comments and our responses are as follows:

I. BPI - Letter of July 24, 1974

Comment

B. In the 24 June 1974 notice, you state "The applicant now indicates that dredging will be done by clamshell. This is the only change in the proposed work previously announced." We strongly object to this change. Use of a clamshell bucket will result in very high turbidity and degradation of water quality. We do not think that the applicant should be allowed to make such an arbitrary change. We would also point out that the State of Indiana permit issued on 3 December 1973 requires specifically that "All of the dredging be done by hydraulic dredge, with a direct line to the fill area". Moreover, 9 October 1973 letter from the State of Indiana Stream Pollution Control Board states:

"We have no objections to the dredging operation but must insist that the operations be conducted by hydraulic cutter head style dredge with the spoil material transported by pipeline to the proposed fill area. We will not permit use of clam shell buckets."

We do not know how this could have been made clearer, at least to anyone who knows how to read and has even a minimal grasp of the English language. Why then did your Mr. Jones give his approval? (cf. applicant's letters of 7 May 1974 and 8 May 1974).

Response

B. We intend to use a clam shell bucket only in the slip and not the harbor. It should be pointed out that if a clam shell is used there will be less water entering the disposal area along with the dredgings than by hydraulic dredging. Secondly, three Gary Work's pumphouses remove enough water from the slip each day to equal over twice the volume of water in the slip. Consequently, the flow of water is from the lake into the slip making it unlikely that turbidity from clam shelling, if in fact this causes turbidity, could affect the lake.

Comment

C. Since filing our letter of 24 April 1974, we have examined the containment area closely. The bulkhead walls currently are less than three feet above the surface of the lake, and on a day when even moderate wave action exists, there is spillage over the wall into the containment area, which then goes out the opening into the lake, carrying with it leachate and other pollution-causing materials. In fact, it appears to be one of the major sources of turbidity and suspended solids in the southern end of the lake. We believe that prior to any permit being granted to allow dredging spoils to be deposited in this containment area, an additional seven feet must be added to the bulkhead walls along the open lake in order to prevent waves from passing over the bulkhead and causing runoff into the lake.

Response

C. Referring to the analysis transmitted to the Corps of Engineers by our letter of July 2, 1974, please note that the turbidity for the three sampling locations outside of the landfill, in the lake, are all less than 1 JTU. In addition, the dissolved solids and total solids inside the landfill are actually less than in the lake, which indicates that the landfill water is not contributing to solids content in lake water.

II. Sierra Club Letter of July 17, 1974

Comment

A-1 Believing is not enough! Where are the water quality analysis data and by whom were they collected and analyzed that will establish to what degree the water in the containment is or is not already polluted? This data must be made publicly available before any permit is issued.

Response

A-1 The analysis of water in the containment area, as well as outside the containment area, was forwarded to the Corps of Engineers with our letter of July 2, 1974.

III. Lake Michigan Federation Letter of July 24, 1974

Comment

The Federation objects to the provision that the proposed dredging be conducted with clamshell rather than hydraulic dredge. We therefore request a public hearing on the proposed project and furth request that the public hearing be consolidated to include the U. S. Steel's South Works Project No. NCCOD-P 4427402.

The Lake Michigan Federation, a Chicago headquartered environmental and conservation organization, has numerous members in the vicinity of the proposed project. Our members utilize Lake Michigan waters for recreational and other uses and their interests would be adverse affected by the proposed project.

Response

This is identical to response B for the July 24 BPI letter.

IV. Lake County Fish & Game Protective Association, Inc. Letter of July 14, 1974

This is the first comment we have received from this organization with respect to the subject dredging. We believe that our letter of June 19, 1974 has already covered the points brought out by them.

As requested in your August 5 letter, we have investigated alternat disposal sites for the dredgings and have determined that none are feasible.

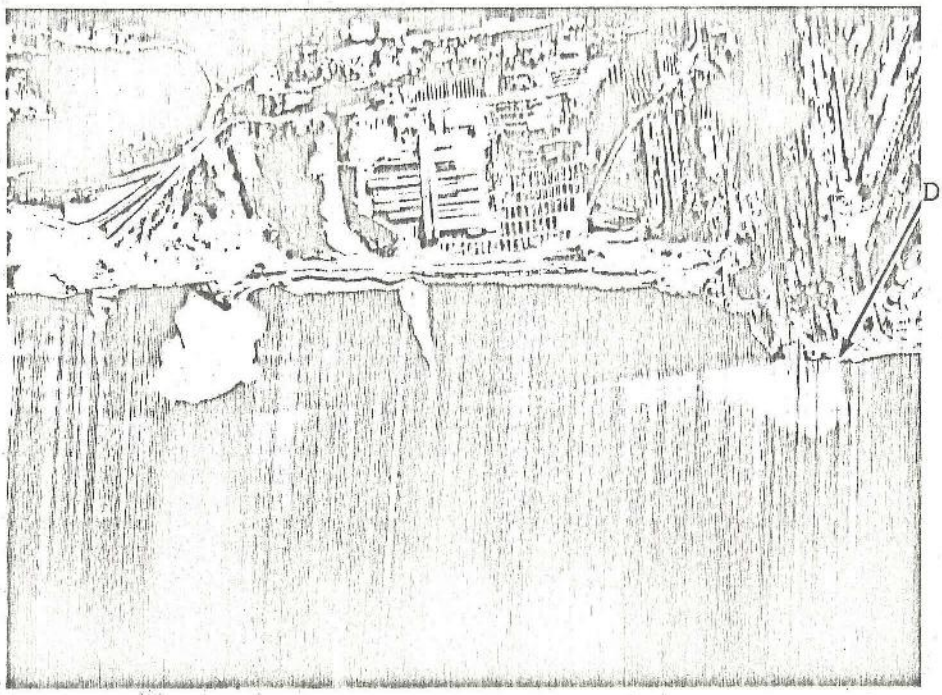
Sincerely yours,

G. T. Haddad, Manager
Engineering Services

MAH:dlh

cc: A. J. Beyer
R. W. Holman
R. B. Jordan
E. W. Mallick

Attachment No. 4



NORTH

Attachment No. 5

ENGINEERING

United States Steel Corporation

600 GRANT STREET
PITTSBURGH, PENNSYLVANIA 15230

June 19, 1974

Mr. James P. Jones
Chief, Operations Division
Department of the Army
Chicago District, Corps of Engineers
219 S. Dearborn Street
Chicago, Illinois 60604

Subject: Dredging Slip and Harbor
Gary Works

Dear Mr. Jones:

This is in reply to your letters of April 24, April 30, and May 8, 1974, transmitting comments from the Sierra Club, USEPA and BPI, concerning the subject dredging. The comments and our responses are as follows:

I. Sierra Club Letter of April 11, 1974

COMMENT

A. The public notice contains insufficient information to enable us to make an accurate evaluation of the impact of the proposed activity on Lake water quality. This deficiency includes but is not limited to:

1. An absence of water quality criteria of the water currently held in the referenced containment. It is our observation that this water is already severely polluted by leachate from the slag deposition in the containment area.

2. No estimate is provided as to the current remaining unfilled (with solids) capacity of the containment.

3. The anticipated water to solids volume ratio of the planned dredging operation.

RESPONSE

A-1 We do not believe the water in the containment area is significantly contaminated, as indicated by prior sample analyses. We will obtain samples just prior to dredging to establish base data.

copies of prior sample analysis

United States Steel Corporation

A-2 The unfilled solids capacity of the containment area is approximately 3,460,000 cubic yards.

A-3 The material to be disposed of will contain 10% solids by volume.

COMMENT

B. This operation will likely result in the discharge of approximately 600,000 cubic yards of spoil dewatering effluent and leachate mixed lake water to the lake without treatment other than an unspecified length of settling.

RESPONSE

B. Assuming a maximum pumping rate of 10,000 GPM for 15 hours per day, we estimate a retention time of 77 days in the containment area.

COMMENT

C. We believe that the discharge of this water without treatment to the lake will add to the already deteriorated condition of Lake Michigan water quality in the south end of the lake.

RESPONSE

C. The 77 days retention time is sufficient to settle solids and the submerged outlet at the east end of the containment area will exclude discharge of floating material. Furthermore, discharge at the indicated daily rate would have an immeasurable effect on Lake Michigan water quality.

COMMENT

D. What the effect of this deposition of spoil in the containment area will be on the useful life of this containment is not analyzed or specified in the public notice. Will it hasten the time when this company will be requesting your approval to construct bulkheads out into the lake proper? It will be convenient for them to cite economic necessity at that time, but it will not be due to an unwise decision at this time. This permit should be conditional upon no extension of the existing bulkhead lakeward at any future time.

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RESPONSE

D. Although the company has no plans at this time to construct lakeward bulkheads, we do not believe that the acceptability of such actions at a future date can be determined at this time.

COMMENT

E. No information is provided in the permit as to the chemical nature or source of material to be dredged. As there are no influent tributaries here, we suspect that its existence is largely due to poor ore handling procedures. A condition of the permit should be the identification of the nature and source of this material and a stipulation as to specific improvements in handling procedures to eliminate the need for future dredging at this location.

RESPONSE

E. A copy of the analyses of the material to be dredged was forwarded to the Chicago District Corps of Engineers on March 12, 1974. The buildup on the bottom is partially due to shoaling caused by currents in the harbor and slip. In addition to our concern over a drop in lake water level, dredging would permit larger boats to use the facilities.

COMMENT

F. If the 4 x 24" submerged pipes are to be installed, they should be required to be sealed closed at the conclusion of the dredging operation, otherwise they will permit slag leachate water to continue to enter the lake, even when the fill is accruing close to the intake end of these pipes.

RESPONSE

F. The main reason for the overflow pipes at the east end is to drain the lake water that is washed over the cell structure during severe storms so that the water level in the containment area will conform with the lake and to permit passage of aquatic life, thus preventing their entrapment. For these reasons, the pipes should not be sealed off.

COMMENT

G. As no information is provided as to the rate of the dredging operation (volume capacity per hour and hours per day and number of dredging units) no meaningful estimate can be made of the dewatering effluent retention time. This information should be provided.

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RESPONSE

G. See response B.

COMMENT

H. A final condition of the permit should be the installation of a water pollution control device in place of the four submerged pipes. Although we have not given detailed consideration to the design of such a structure, we suggest a combination of a rapid sand and cake layered replaceable filter followed by an in-channel aerator before the containment effluent is allowed to mix with the lake water. pH adjustment may also be needed. Finer details will depend upon your providing us with details of the current water quality in the containment and the results of elutriate tests on the dredgeable sediments.

RESPONSE

H. We believe the aforementioned retention time is sufficient to settle solids, the submerged discharge will exclude floating material in the effluent, and no further treatment is needed. Additionally, filtration or other such treatments would deter passage of aquatic life. We will be monitoring water quality as dredging progresses to determine if it is satisfactory. If not, corrective action will be taken.

II. Environmental Protection Agency Letter of April 23, 1974

COMMENT

1. Establish and carry out a program for immediate removal of debris during operations to prevent the accumulation of unsightly, deleterious and/or polluted materials in the waterway.

RESPONSE

1. We will comply.

COMMENT

2. Employ measures to prevent or control spilled fuels or lubricants from entering the lake, and formulate a contingency plan to be effective in the event of a spill.

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RESPONSE

2. The dredging contractor will be required to have a containment boom on hand for use if necessary and a means to remove oil from the area. Also the submerged discharge pipes should prevent discharge of floating material from the containment area.

COMMENT

3. Conduct dredging operations in the lake in a manner to minimize increases in suspended solids and turbidity which may degrade water quality.

RESPONSE

3. We will comply.

COMMENT

4. Place all dredged or excavated materials in a confined area to prevent the return of polluted materials to the lake by surface runoff, or by leaching.

RESPONSE

4. The containment area is confined by cell structure and rubble mound shore arm.

COMMENT

5. Investigate for water supply intakes or other activities (in the vicinity of the proposed project) which may be affected by suspended solids and turbidity increases caused by work in the lake, and give sufficient notice to the owners of affected activities to allow preparations for any changes in water quality.

RESPONSE

5. The only intakes in the immediate vicinity are those for U. S. Steel, Gary Works. Additionally, the retention time provided should permit the dredged material to settle.

COMMENT

6. The discharge from the spoil disposal area shall meet applicable water quality standards.

RESPONSE

6. Tests will be run on water samples as required by Corps and State permits to determine if the quality is satisfactory. If not, corrective action will be taken.

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III. B.P.I. Letter of April 24, 1974

In accordance with the Corps of Engineers request in the May 8, 1974 letter, we are responding only to those comments pertaining to proposed dredging, disposal, and monitoring.

COMMENT

5. The applicant has failed to furnish the information requested by the Corps on 25 October, 1973. In a letter from James P. Jones, Chief of the Operations Division of the District Office to G. J. Haddad of U. S. Steel, paragraph "d" defined 19 parameters to be included in water samples to be conducted prior to the dredging. The applicant's submittal, in a letter dated 12 March, 1974 from G. J. Haddad of U. S. Steel to James P. Jones of your office, omitted analysis of 12 of these parameters, including:

Dissolved solids	NO_3N
Turbidity	Cyanide
Chloride	HS
Sulfate	Specific Conductance
B.O.D.	Organic N
Total Soluble Phosphate	pH

The applicant's failure to provide the requested data not only makes the application insufficient for purposes of review and processing, but establishes a precedent that must be taken as prima facie evidence that the applicant will not comply with permit conditions on monitoring during and after the proposed dredging. It should be noted that this failure to comply occurred after the applicant attested that "samples will include both Federal and State requirements" in a letter from G. J. Haddad to the Chicago District office, dated 11 January, 1974.

RESPONSE

5. The October 25, 1973 letter from the Corps refers to water samples prior to dredging, during dredging and once a week for 30 days after dredging and we had assumed the before dredging samples to be taken about one week before dredging. The letter can be interpreted to mean these samples are required before a permit will be issued, however, and we obtained them the week of June 3. We will forward the results shortly. The parameters reported in the G. J. Haddad letter of March 12, 1974 to James P. Jones, Corps of Engineers, pertains to bottom sediment, not water samples.

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COMMENT

6. New samples should be required taking into account the defects of the present data. The data that were provided show gross variation in analyses, indicating that replicate samples should have been taken at each location in order to determine accurately the composition of the sediments.

RESPONSE

6. We believe the bottom samples taken were representative and the material would not necessarily be identical from all locations. The samples were taken by a firm familiar with such work and they used a Type "U" soil sampling device which takes a core sample. Since no parameters were given by the Corps, we analyzed for the same items which were requested by the State during the 1968 dredging.

COMMENT

7. The volatile solids figure provided by the applicant is not sufficient to make a determination of environmental impact; it is necessary to know what this consists of:

RESPONSE

7. The analysis for volatile solids was determined in accordance with "Standard Methods for the Examination of Water and Waste Water, 13th Edition, Part 224 G". We believe that the volatile solids came from organic matter and volatile inorganic salts.

COMMENT

8. There is no estimate of solids density, and therefore, it is not possible to calculate what total amounts of solids, COD, etc., will be dredged. Our own calculations indicate that the probable amounts will be on the order of:

Parameter	Pounds
Total Solids	144,000,000
Iron	3,000,000
Volatile Solids	4,600,000
COD	2,851,287
Oil and Grease	69,948
Ammonia - N	8,440
Phosphate	1,152
Phenols	81.5

United States Steel Corporation

RESPONSE

8. We do not have the solids density but based on percentages, the estimates given are reasonable.

COMMENT

9. The data provided do not include important parameters necessary to assess the environmental impact of the dredging material, including runoff. A crucial parameter is particle size distribution which will heavily influence whether the solids settle out within the containment area or pass through the four outfalls into Lake Michigan. In addition, since the bulk of the dredging will occur off an outfall (see Attachment A hereto for an aerial photograph of the plume), there is a distinct possibility that the sediments may contain toxic materials. The applicant should be required to conduct sampling and analyses for the following parameters:

Antimony	Manganese
Arsenic	Mercury
Beryllium	Molybdenum
Cadmium	Nickel
Chromium	Selenium
Copper	Sulfide
Lead	Zinc

If any of these are found to be present, strict criteria for permissible levels in the overflow should be formulated and applied as permit conditions.

RESPONSE

9. We do not have the particle size distribution of the bottom samples but the 77 days retention time, plus the 1.8 miles from influent to effluent in the containment area, should provide sufficient treatment. The outfall referred to discharges only non-contact cooling water and, therefore, we do not think that sampling and analyses is required.

COMMENT

17. There is no statement in the public notice of the extent of the applicant's monitoring program, such as information on the following:

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A. The location of the sampling stations
B. The parameters that will be sampled.
C. The frequency of the sampling
D. How soon after sampling the analyses will be made.
E. How quickly the analyses will be made available to regulatory agencies
F. Which regulatory agencies will receive the analyses.

RESPONSE

17- A. Attached is a sketch showing the location of the sampling stations.

B. The water samples inside the landfill site and in the lake to the east of the new spillway pipes will be analyzed as shown in Corps of Engineers letter of October 25, 1973 except for Item 14 HS which they advised verbally was not required.

The samples from the spillway pipes will be analyzed for (1) oil, (2) total iron and (3) suspended solids.

C. The samples from the spillway pipes will be taken once per day during dredging operation. The three samples inside the landfill site and the three in the lake will be taken once before dredging, once per week during dredging and once per week for 30 days after dredging is complete.

D. The analysis of the daily samples from the spillway discharge will be started as soon as received in the lab and completed in 24 hours. The analysis of the weekly samples will be started as soon as received and completed within 7 days.

E. The State letter of October 9, 1973 requests filing of the spillway pipe samples analysis on a monthly basis. We do not find a frequency requested for the Corps of Engineers analysis but if necessary it can be submitted by the month or by the week.

F. Analysis results will be reported to the State of Indiana and the Corps of Engineers.

Sincerely yours,

G. J. Haddad, Manager
Engineering Services

Attachment
MAH:mgt
cc: A. J. Beyer
R. W. Gelman

Attachment # 6

4477305 -2- 4/23/74

Comments:

1. Establish and carry out a program for immediate removal of debris during operations to prevent the accumulation of unsightly, deleterious and/or polluted materials in the waterway.

2. Employ measures to prevent or control spilled fuels or lubricants from entering the lake, and formulate a contingency plan to be effective in the event of a spill.

3. Conduct dredging operations in the lake in a manner to minimize increases in suspended solids and turbidity which may degrade water quality.

4. Place all dredged or excavated materials in a confined area to prevent the return of polluted materials to the lake by surface runoff, or by leaching.

5. Investigate for water supply intakes or other activities (in the vicinity of the proposed project) which may be affected by suspended solids and turbidity increases caused by work in the lake, and give sufficient notice to the owners of affected activities to allow preparations for any changes in water quality.

6. The discharge from the spoil disposal area shall meet applicable water quality standards.

Our comments are contingent on the following:

1. Applicable only to a total of approximately 60,000 cubic yards of material to be dredged and deposited in the containment area.

2. That during the period of deposit and settling of the material in the containment area, the effluent will be monitored and the operations discontinued if the discharge does not meet applicable water quality standards.

OCT 18 1974

DEPARTMENT OF THE ARMY
CHICAGO DISTRICT. CORPS OF ENGINEERS
219 SOUTH DEARBORN STREET
CHICAGO. ILLINOIS 60604

Attachment No. 7

NCCOD-P

11 October 1974

Lake Michigan Federation
53 West Jackson Boulevard
Chicago, Illinois 60604

Gentlemen:

As you know, a public hearing is scheduled for 23 October 1974 at Gary, Indiana, to allow interested persons to comment on two applications submitted by the United States Steel Corporation for dredging at the South Works and the Gary Works, and for disposal of the dredged material in a retaining bulkhead immediately south of Gary Harbor.

A public hearing is provided for where (1) the discharge of dredged or fill material into navigable waters is involved, and (2) where a person or persons having an interest which may be affected by the issuance of a permit requests a hearing.

In your request for a public hearing, you indicated your belief that some of your members would be adversely affected by the proposed work. Prior to the public hearing, we need a list of those members who believe that they will be adversely affected and the manner in which they will be affected. The list need not be exhaustive but it should include all those in the immediate vicinity.

Sincerely yours,

JAMES M. MILLER
Colonel, Corps of Engineers
District Engineer